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Hiroshi Kakuda

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EXAMINER

ABDUL-ALI, OMAR R

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/509,557	Applicant(s) KAKUDA, HIROSHI	
	Examiner Omar Abdul-Ali	Art Unit 2178	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 January 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3,5-19 and 21-24 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) _____ is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>1/08</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

The following action is in response to the Request for Continued Examination (RCE) filed January 29, 2008. Claims 1-3, 5-19, and 21-24 are pending and have been considered below.

1. The prior art rejections have been withdrawn as necessitated by Applicant's Amendments.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-3, 6-8, 15-19, and 21-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hayes et al. (US 2002/0143805) in view of Vidal (US 6,914,551).

Claims 1, 18, and 19: Hayes discloses a readable medium and device, comprising:

a. detection means for detecting an information processing apparatus through wireless communication (page 6, paragraph 93);

Hayes discloses a first acquisition means for acquiring operation screen information of a plurality of said information processing apparatuses, with each operation screen including a full display for controlling the corresponding information

processing apparatus (page 6, paragraph 93/page 7, paragraph 116). Specifically, Hayes discloses supporting full operation screens for multiple devices in a single display region '24' of Figure 1. The example shows a full screen for television controls. Hayes does not explicitly disclose acquiring the operation screen information when the information processing apparatuses are detected. Vidal discloses a similar apparatus and method, further comprising devices presenting unique display information when they are discovered by a discovery command sent by the device. Hayes further discloses performing two-way communication between the remote sources and the remote control, and changing the operation screen for each device in such a way that only functions that are supported by that device are displayed. It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the operation screen information when the devices are detected in Hayes, because after detecting the devices, a judgment is made to output different operation screen information based on the selected device. One would have been motivated to acquire the operation screen information of information processing apparatuses when detected in order to communicate with devices that are intended for use.

c. storage management means for storing the operation screen information (page 5, paragraph 84);

d. editing means for editing the operation screen information to display operation screen information for the plurality of information processing apparatuses in a single display region (Figure 1/page 7, paragraph 116). Specifically, Hayes discloses

changing the operation screen '24' for each device in such a way that only functions that are supported by that device are displayed.

e. display means for displaying the edited operation screen information (Figure 1/page 7, paragraph 116). Specifically, Hayes discloses changing the operation screen '24' for each device in such a way that only functions that are supported by that device are displayed.

f. control means for controlling the [[said]] information processes based on an input provided to the displayed operation screens (page 8, paragraph 118). Hayes discloses controlling devices with input commands that send IR command signals to the appropriate devices.

Hayes does not explicitly disclose a detecting means for detecting when a first of the information processing apparatuses moves outside a range for the wireless communication. However, Vidal discloses detecting when a previously discovered appliance is not currently within range and temporarily removing the appliance from the appliance list. It would have been obvious to one having ordinary skill in the art at the time the invention was made to detect when a first of the information processing apparatuses moves outside of coverage range because it was a known technique at the time the invention was made. One would have been motivated to detect when a first of the information processing apparatuses moves outside of coverage range in order to provide two-way communication between active devices.

Hayes does not explicitly disclose clearing means for clearing the display of the operation screen information for the first information processing apparatus when the first

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information processing apparatus moves outside the range. However, Vidal discloses detecting when a previously discovered appliance is not currently within range and temporarily removing the appliance from the appliance list. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to clear the display of the operation screen information for the first information processing apparatus when the first information processing apparatus moves outside the range in Hayes. One would have been motivated to clear the display of the operation screen information for the first information processing apparatus in order to conserve screen real estate.

Claim 2: Hayes and Vidal disclose a readable medium and device as in Claim 1 above, and Hayes further discloses:

a. said first acquisition means acquires said operation screen information from said information processing apparatus through said wireless communication (page 6, paragraph 93).

Claim 3: Hayes and Vidal disclose a readable medium and device as in Claim 1 above, and Hayes further discloses:

a. said first acquisition means acquires said operation screen information from a predetermined server managing said operation screen information through said wireless communication (page 5, paragraph 92).

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Claim 6: Hayes and Vidal disclose a readable medium and device as in Claim 1 above, but does not explicitly disclose an intensity detection means for detecting intensities of said respective radio waves emitted from said plurality of information processing apparatuses, wherein said editing means edits, based on detection by said intensity detection means, said operation screen information so that said operation screen of said information processing apparatus that emits a high intensity radio wave is displayed by priority. However, it would have been obvious to include an intensity detection means for detecting intensities of radio waves emitted from remote devices in order to display these devices in order of priority. For example, when detecting wireless networks in the computer arts, the networks with the highest signal strength are displayed first. One would have been motivated to include an intensity detection means in Hayes in order to only display the devices that are in range of the remote.

Claim 7: Hayes and Vidal disclose a readable medium and device as in Claim 6 above, but does not explicitly disclose said display means determines, based on detection by said intensity detection means, whether or not said control apparatus is out of a communication coverage with said information processing apparatuses, if it is determined that said control apparatus is out of said communication coverage, said operation screen is displayed so that transparency thereof is gradually increased at every predetermined time. However, it would have been obvious to one having ordinary skill in the art at the time the invention was made to include an option to change the appearance of an appliance that is out of the communication range of the remote

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device. One would have been motivated to display the operation screen so that transparency is gradually increased at every predetermined time in order to notify the user that the signal intensity of an appliance is becoming weaker as the remote device is moved.

Claim 8: Hayes and Vidal disclose a readable medium and device as in Claim 1 above, and Hayes further discloses:

a. said editing means edits said plurality of operation screen information so that said operation screen being operated is continuously displayed (page 15, paragraph 178).

Claim 15: Hayes and Vidal disclose a readable medium and device as in Claim 1 above, and Hayes further discloses:

a. said operation screen information is described in an HTML (page 9, paragraph 134).

Claim 16: Hayes and Vidal disclose a readable medium and device as in Claim 1 above, and Hayes further discloses:

a. second acquisition means for acquiring other operation screen information in accordance with a category of said information processing apparatus, wherein said display means displays, until said operation screen information is acquired by said first

acquisition means, other operation screen based on said other operation screen information acquired by said second acquisition means (page 8, paragraph 118).

Claim 17: Hayes and Vidal disclose a readable medium and device as in Claim 1 above, and Hayes further discloses:

a. if said information processing apparatus transmits said operation screen information, said first acquisition means transmits feature information indicating a feature of said control apparatus and acquires said operation screen information transmitted from said information processing apparatus in response to said transmission (page 7, paragraph 116).

Claims 21, 23, and 24: Hayes discloses a readable medium and device, comprising:

a. storage means for storing operation screen information, that is edited by the [[said]] control apparatus, the [[said]] operation screen information providing the [[a]] control apparatus with a full display operation screen, the operation screen providing controls for the information processing apparatus (page 5, paragraph 84/page 8, paragraph 123/page 9, paragraph 134/page 7, paragraph 116). Specifically, Hayes discloses changing the operation screen for each device in such a way that only functions that are supported by that device are displayed.

b. transmission means for transmitting the [[said]] said operation screen information to the said control apparatus through wireless communication in response to a request from the said control apparatus (page 6, paragraph 93). Hayes discloses two-

way communication between the remote and devices including accessing, processing, and displaying data from the remote sources.

c. wherein the control apparatus edits the operating screen information to display a plurality of operating screens for a plurality of information processing apparatuses within a single display (page 7, paragraph 116/Figure 1/page 9, paragraph 134). Hayes discloses supporting operation screens for multiple devices in a single display region '24' of Figure 1.

Hayes does not explicitly disclose the control apparatus removes the display of the operating screen for the information processing apparatus when the information processing apparatus moves outside a range of the wireless communication. However, Vidal discloses detecting when a previously discovered appliance is not currently within range and temporarily removing the appliance from the appliance list. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to clear the display of the operation screen information for the first information processing apparatus when the first information processing apparatus moves outside the range in Hayes. One would have been motivated to clear the display of the operation screen information for the first information processing apparatus in order to conserve screen real estate.

Claim 22: Hayes discloses a readable medium and device as in Claim 21 above, further comprising:

a. wherein the operation screen information is selected based on feature information indicating a feature of said control apparatus, wherein said transmission means transmits the selected said operation screen information (page 7, paragraph 116). Specifically, Hayes discloses changing the operation screen for each device in such a way that only functions that are supported by that device are displayed.

4. Claims 5, and 9-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hayes et al. (US 2002/0143805) in view of Vidal (US 6,9914,551) and further in view of Hideyuki (JP 09-023487).

Claim 5: Hayes and Vidal disclose a readable medium and device as in Claim 1 above, but neither reference explicitly discloses said storage management means clears less frequently used operation screen information from among said operation screen information, said storage of which is managed. Hideyuki discloses a similar device that further discloses no longer displaying the symbol of a function that is hardly used, decreasing the number of symbols on the display (paragraph 36). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to clear less frequently used operation screen information in Hayes. One would have been motivated to clear less frequently used operation screen information to only present the user with operation screen information that is needed.

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Claim 9: Hayes and Vidal disclose a readable medium and device as in Claim 1 above, but neither reference explicitly discloses a history management means for managing a history of control of said information processing apparatus, which is performed by said control means. Hideyuki discloses a similar device that further discloses tracking the operating frequency of specific users, and changing the display pattern in a display means according to the tracking result (paragraph 11/paragraphs 14-15). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to include a history management means in Hayes. One would have been motivated to include a history management means in order to personalize the display for a user according to usage patterns.

Claim 10: Hayes, Vidal, and Hideyuki disclose a readable medium and device as in Claim 9 above, and Hideyuki further discloses tracking the operating frequency of control functions for each user, and choosing the display pattern according to the operating frequency of said control function (paragraphs 14-15). Though neither reference explicitly discloses displaying the most recently operated function by priority, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the design disclosed by Hideyuki to display the most recently operated function by priority. One would have been motivated to display the most recently operated function by priority in order to allow the user to easily access the last function used when operating the remote.

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Claim 11: Hayes, Vidal, and Hideyuki disclose a readable medium and device as in Claim 9 above, and Hideyuki further discloses tracking the operating frequency of control functions for each user, and choosing the display pattern according to the operating frequency of said control function (paragraphs 14-15). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to edit said operation screen information so that a most frequently used operation screen is displayed by priority. One would have been motivated to display a most frequently used operation screen by priority in order to provide a display pattern catered to a user's interest.

Claim 12: Hayes, Vidal, and Hideyuki disclose a readable medium and device as in Claim 9 above, and Hideyuki further discloses tracking the operating frequency of control functions for each user, and choosing the display pattern according to the operating frequency of said control function (paragraphs 14-15). Though neither reference explicitly discloses editing the operation screen based on which operation screen information is most likely to be used within a period of time, including a current time, it would have been obvious to one having ordinary skill in the art at the time the invention was made that the data tracked by the history management means in Hideyuki would include usage according to time. One would have been motivated to edit the display based on a period of time in order to allow the user to view the operations that are most likely to be used at a certain time of the day.

Claim 13: Hayes, Vidal, and Hideyuki disclose a readable medium and device as in Claim 9 above, and Hideyuki further discloses tracking the operating frequency of control functions for each user, and choosing the display pattern according to the operating frequency of said control function (paragraphs 14-15). Hayes further discloses an operating screen with TV, Cable, and VCR controls included on the same screen (Figure 1). Therefore, it would have been obvious to one having ordinary skill in the art to provide a selection means for selecting other information processing apparatus relevant to said information processing apparatus based on said history managed by said history management means, so that said operation screen of said other processing apparatus is selected by said selection means is displayed together with said operation screen of said information processing apparatus. One would have been motivated to display relevant operation screens together in order to allow the user to easily operate the appliances that are most likely to be used together.

Claim 14: Hayes, Vidal, and Hideyuki disclose a readable medium and device as in Claim 9 above, and Hideyuki further discloses tracking the operating frequency of control functions for each user, and choosing the display pattern according to the operating frequency of said control function (paragraphs 14-15). Hayes further discloses an operating screen with TV, Cable, and VCR controls included on the same screen (Figure 1). Though neither reference explicitly discloses said selection means selects other information processing apparatus relevant to said information processing apparatus based on a time difference between times at which said information

processing apparatus and said other information processing apparatus are respectfully controlled, said times being obtained from said history, it would have been obvious to one having ordinary skill in the art at the time the invention was made to track the times each application is accessed along with the frequency of operation in order to determine the relevancy between each information processing apparatus. One would have been motivated to select other information processing apparatus relevant to said information processing apparatus based on a time difference in order to display relevant appliances together according to a user's usage patterns.

Response to Arguments

5. Applicant's arguments with respect to Claims 1-3, 5-19, and 21-24 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Omar Abdul-Ali whose telephone number is 571-270-1694. The examiner can normally be reached on Mon-Fri(Alternate Fridays Off) 8:30 - 6:00 EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen Hong can be reached on 571-272-4124. The fax phone number for the organization where this application or proceeding is assigned is 571-270-2694.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

OAA
2/28/2008

/Stephen S. Hong/
Supervisory Patent Examiner, Art Unit 2178